

What is claimed is;

1. An electronic camera comprising;

an image-capturing device for photographing that captures an image of a subject image passing through a taking lens and outputs image data;

an image-capturing device for scene analysis that is provided at a position conjugate with said image-capturing device for photographing relative to said taking lens and receives light from the subject image to output scene analysis image data;

a gain calculation unit that calculates gain by using at least either image data corresponding to a large area of said image-capturing device for scene analysis or image data corresponding to a small area of said image-capturing device for scene analysis; and

a gain adjustment unit that performs gain adjustment by applying said gain calculated at said gain calculation unit to the image data output by said image-capturing device for photographing.

2. An electronic camera according to claim 1, wherein:

said large area is constituted of a plurality of first areas obtained by dividing the image-capturing area of said image-capturing device for scene analysis, into a unit area including a first specific number of

pixels; and

said small area is constituted of a plurality of
second areas achieved by dividing the image-capturing
area of said image-capturing device for scene analysis
5 into a unit area including a second specific number of
pixels which is smaller than the first specific number.

3. An electronic camera according to claim 1, wherein:

said gain calculation unit selects image data of
10 either said large area or said small area in
correspondence to the type of subject and calculates
gain base on the image data in the selected area.

4. An electronic camera according to claim 2, further
15 comprising;

a decision-making unit that makes a decision as to
whether or not there is an area having image data that
are judged to indicate an achromatic color among said
plurality of first areas and further makes a decision as
20 to whether or not there is an area having image data
judged to indicate skin color among said plurality of
second areas if it is decided that there is no area with
image data judged to indicate an achromatic color,
wherein:

25 if said decision-making unit decides that there is

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an area having image data that are judged to indicate an achromatic color, said gain calculation unit calculates gain based upon the image data in said area having the image data judged to indicate an achromatic color; and

5 if said decision-making unit decides that there is an area having image data that are judged to indicate skin color, said gain calculation unit calculates gain based upon the image data in said area having the image data indicating skin color.

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5. An electronic camera comprising;

 an image-capturing device for photographing that captures an image of a subject image passing through a taking lens and outputs image data;

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 an image-capturing device for scene analysis that is provided at a position conjugate with said image-capturing device for photographing relative to said taking lens and receives light from the subject image to output scene analysis image data;

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 a detection unit that detects an area having image data that are judged to indicate a predetermined color in image data corresponding to a predetermined area of said image-capturing device for scene analysis;

 a gain calculation unit that calculates gain based
25 upon a color indicated by the image data in said area

detected by said detection unit; and

a gain adjustment unit that performs gain adjustment by applying said gain calculated by said gain calculation unit to the image data output by said image-capturing device for photographing.

6. An electronic camera according to claim 5, wherein:
said detection unit detects;

(1) presence of an area having image data judged to indicate an achromatic color among a plurality of first areas achieved by dividing an image-capturing area of said image-capturing device for scene analysis into a unit area including a first specific number of pixels; and

(2) presence of an area having image data judged to indicate skin color among a plurality of second areas achieved by dividing the image-capturing area of said image-capturing device for scene analysis into a unit area including a second specific number of pixels which is smaller than the first specific number.

7. An electronic camera according to claim 6, wherein:
said detection unit performs detection for an area having image data that are judged to indicate skin color if an area having image data that are judged to indicate

an achromatic color cannot be detected.

8. An electronic camera according to claim 5, further comprising:

5 a selection unit that selects either a first photographing mode suited to white balance adjustment performed by using an achromatic color or a second photographing mode suited to white balance adjustment performed by using skin color, wherein:

10 a color to be detected by said detection unit is selected in correspondence to a photographing mode selected by said selection unit and gain is calculated by using image data indicating the selected color.

15 9. An electronic camera according to claim 5, further comprising:

a selection unit that selects, at least, a landscape photographing mode, wherein:

20 if landscape photographing mode has been selected by said selection unit, said detection unit detects, at least, an area having image data that are judged to indicate an achromatic color; and

said gain calculation unit calculates gain based upon the image data in said area having the image data
25 judged to indicate an achromatic color.

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10. An electronic camera according to claim 5, further comprising:

a selection unit that selects, at least, a portrait
5 photographing mode, wherein:

if said portrait photographing mode has been
selected by said selection unit, said detection unit
detects, at least, an area having image data judged to
indicate skin color; and

10 said gain calculation unit calculates gain based
upon the image data in said area having the image data
judged to indicate skin color.

11. An electronic camera comprising;

15 an image-capturing device for photographing that
captures an image of a subject image passing through a
taking lens and outputs image data;

an image-capturing device for scene analysis that
is provided at a position conjugate with said image-
20 capturing device for photographing relative to said
taking lens and receives light from the subject image to
output scene analysis image data;

a conversion unit that converts image data in a
predetermined area of said image-capturing device for
25 scene analysis to color data in either a first color-

related coordinate system or a second color-related coordinate system;

a gain calculation unit that calculates gain based upon the color data resulting from conversion performed by said conversion unit; and

a gain adjustment unit that performs gain adjustment by applying said gain calculated by said gain calculation unit to the image data output by said image-capturing device for photographing.

12. An electronic camera according to claim 11, wherein:

said conversion unit converts;

(1) image data in a plurality of first areas achieved by dividing an image-capturing area of said image-capturing device for scene analysis into a unit area including to a first specific number of pixels, to color data in the first coordinate system; and

(2) converts image data in a plurality of second areas achieved by dividing the image-capturing area of said image-capturing device for scene analysis into a unit area including a second specific number of pixels that is smaller than the first specific number, to color data in the second coordinate system.

13. An electronic camera according to claim 11, further comprising:

a selection unit that selects either a first photographing mode suited to white balance adjustment performed by using an achromatic color or a second photographing mode suited to white balance adjustment performed by using skin color, wherein:

said conversion unit converts the image data in the predetermined area of said image-capturing device for scene analysis to color data in the first coordinate system or the second coordinate system in correspondence to the photographing mode selected by said selection unit.

14. An electronic camera according to claim 11, further comprising:

a selection unit that selects, at least, a landscape photographing mode, wherein:

if landscape photographing mode has been selected by said selection unit, said conversion unit converts the image data in the predetermined area of the image-capturing device for scene analysis to color data in the first coordinate system.

15. An electronic camera according to claim 11, further

comprising:

a selection unit that selects, at least, a portrait photographing mode, wherein:

if said portrait photographing mode has been
5 selected by said selection unit, said conversion unit converts the image data in the predetermined area of said image-capturing device for scene analysis to color data in the second coordinate system.

10 16. An electronic camera comprising;

an image-capturing device for photographing that captures an image of a subject image passing through a taking lens and outputs image data;

an image-capturing device for scene analysis that
15 is provided at a position conjugate with said image-capturing device for photographing relative to said taking lens and receives light from the subject image to output scene analysis image data;

a conversion unit that converts image data in a
20 plurality of first areas achieved by dividing an image-capturing area of said image-capturing device for scene analysis into a unit area including a first specific number of pixels, to color data in a first color-related coordinate system or converts image data in a plurality
25 of second areas achieved by dividing the image-capturing

area of said image-capturing device for scene analysis
into a unit area including a second specific number of
pixels that is smaller than the first specific number,
to color data in a second color-related coordinate
5 system;

a gain calculation unit that calculates gain using
the color data in the first coordinate system or the
second coordinate system resulting from conversion
performed by said conversion unit; and

10 a gain adjustment unit that performs gain
adjustment by applying said gain calculated by said gain
calculation unit to the image data output by said image-
capturing device for photographing.

15 17. An electronic camera according to claim 16, further
comprising:

a selection unit that selects either a first
photographing mode suited to white balance adjustment
performed by using an achromatic color or a second
20 photographing mode suited to white balance adjustment
performed by using skin color, wherein:

said conversion unit converts said scene-analysis
image data to color data in the first coordinate or the
second coordinate system in correspondence to the
25 photographing mode selected by said selection unit.

18. An electronic camera according to claim 16, further comprising:

a selection unit that selects, at least, a
5 landscape photographing mode, wherein:
if landscape photographing mode has been selected
by said selection unit, said conversion unit converts
said scene-analysis image data to color data in the
first coordinate system.

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19. An electronic camera according to claim 16, further comprising:

a selection unit that selects, at least, a portrait
photographing mode, wherein:
15 if said portrait photographing mode has been
selected by said selection unit, said conversion unit
converts said scene-analysis image data to color data in
the second coordinate system.

20 20. An electronic camera comprising:

an image-capturing device that captures an image of
a subject image passing through a taking lens and
outputs image data;

a color temperature detection unit that is provided
25 at a position conjugate with said image-capturing device

relative to the taking lens and receives light of the subject image to detect color temperature information;

5 a gain calculation unit that detects skin color based on the color temperature information detected by said color temperature detection unit for a predetermined area in a photographic field to calculate gain by using the skin color; and

10 a gain adjustment unit that performs gain adjustment by applying said gain calculated at said gain calculation unit to the image data output by said image-capturing device.

21. An electronic camera according to claim 20, further comprising:

15 a focal point detection unit that detects a focal adjustment state of the taking lens in a plurality of areas within the photographic field;

20 a focal point detection area selection unit that selects a detection area in which detection is performed by said focal point detection unit among the plurality of areas; and

a lens drive unit that drives the taking lens to a focus position based upon the focal adjustment state detected by said focal point detection unit, wherein:

25 said gain calculation unit detects skin color based

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on the color temperature information detected by the color temperature detection unit for the detection area selected by said focal point detection area selection unit to calculate gain using the skin color.

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22. An electronic camera according to claim 21, wherein:

10 said gain calculation unit calculates gain by using the skin color detected at a point in time at which said lens drive unit completes the focal adjustment drive and said gain adjustment unit performs gain adjustment by applying the gain to the image data output by said image-capturing device.

15 23. An electronic camera according to claim 20, further comprising:

 a photometering unit that detects a brightness level of the subject image in a plurality of areas in the photographic field; and

20 a photometering area selection unit that selects a photometering area where a photometering operation is to be performed by said photometering unit among the plurality of areas, wherein:

 said gain calculation unit detects skin color based
25 on the color temperature information detected by said

color temperature detection unit for the photometering area selected by said photometering area selection unit to calculate gain using the skin color.

- 5 24. An electronic camera according to claim 20,
wherein:

said gain calculation unit calculates gain based upon a predetermined color if the skin color cannot be detected.

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